

### REMARKS

The Specification has been amended to include the sentence: "As seen in Figure 2, the ejector 31 is located outside of the inner boiler 3 and outer boiler 12." Support for this language can be found in Figure 2 as originally filed (see the position of the ejector 31). Accordingly, no new matter is added by this amendment.

Claim 1 has been amended to more clearly state the invention as claimed. In addition, Claims 10-12 have been amended to comport with the amendment to Claim 1. Claims 23-24 have been added and Claims 16-22 have been canceled herein. Support for the amended claims can be found throughout the specification and, more specifically on page 2, lines 17-23 (for the cylindrical amendments) and on page 4, lines 12-19 for the steam valve amendments. No new matter has been added herewith. As a result of the amendment, Claims 1-12, 14-15 and 23-24 are presented for further examination.

The changes made to the claims by the current amendment, including deletions and additions, are shown herein with deletions designated with a strikethrough and additions underlined.

#### Rejection under 35 U.S.C. §103(a)

Claims 1-6, 9-12, and 14-22 are rejected under 35 U.S.C. §103(a) as unpatentable over Kalasek in view of the Applicant's admission of the state of the prior art.

Claims 7-8 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kalasek and Applicant's admission of the state of the prior art, as applied to claims 1-6, 9-12 and 14-22 above, and further in view of Brucker WO 92/01479.

However, the cited references fail to establish a *prima facie* showing of obviousness. Such a showing requires that the prior art references disclose all of the claimed elements. The presently claimed invention comprises a number of features that are not taught by Kalasek et al. Brucker teaches only the use of lateral supports and a hinged door. Therefore, neither Kalasek nor Brucker disclose a cylindrical sterilization boiler at all, much less a cylindrical double walled boiler, meaning that it has a cylindrical inner wall and a cylindrical outer wall with water present in the outer boiler.

Further, even if a *prima facie* showing were established, the unexpected advantages of the presently claimed invention further prove that the presently claimed invention would not have been obvious. As discussed above, the presently claimed invention comprises an ejector outside

of the inner and outer boilers. In other words, the present invention provides a combination of a double boiler system with an ejector positioned outside of both boilers. This combination is particularly advantageous over the prior art. In particular, these features allow for the inner chamber to be continuously heated by the steam present in the outer boiler even during vacuum. This allows for an increase in sterilization efficiency because the chamber need not significantly cool down during the vacuum phase of the process.

The presently claimed sterilizer advantageously provides steam in the outer boiler constantly during sterilization, including during the vacuum phase of the process. Specifically, the process of pulsatingly introducing steam involves the following steps:

steam is drawn into the inner boiler from the outer boiler;

the ejector is cooled outside the boiler to condense steam from the inner boiler into liquid water, and the water is ejected, thereby producing a vacuum in the inner boiler;

steam is once again drawn into the inner boiler.

During this process, steam is constantly present in the outer boiler. Thus, even during the vacuum part of the process, the high temperature of the inner boiler is maintained. See Applicant's specification at page 4, lines 12-19. This produces a more efficient sterilization because the temperature is kept constantly high.

In contrast, in the prior art, even where a condensor is located outside of the boiler, nothing is provided to maintain the temperature of the boiler during vacuum. Thus, in the prior art, the temperature of the boiler cools during the vacuum part of the process and the efficiency of sterilization is reduced.

Thus, Kalasek cannot render the claimed invention obvious because Kalasek does not teach all of the claimed elements, including the cylindrical boiler, a double-walled boiler and an ejector on the outside of the inner and outer boilers. Further, even if Kalasek did teach all of the claimed elements, the presently claimed invention provides significant unexpected advantages that could not have been predicted based on the prior art. In particular, the presently claimed invention works surprisingly more efficiently because it keeps a constant production of steam outside of the inner boiler which keeps the temperature high even during production of a vacuum. Thus, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §103(a).

Appl. No. : 09/230,001  
Filed : May 18, 1999

### Conclusion

In light of the Applicant's amendments to the claims as well as the foregoing remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any remaining concerns which might prevent the prompt allowance of the application, the Examiner is respectfully requested to contact the undersigned at the telephone number appearing below.

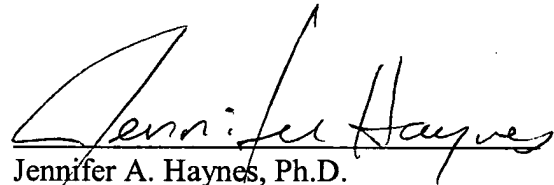
Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: Nov. 10, 2003

By:



Jennifer A. Haynes, Ph.D.

Registration No. 48,868

Agent of Record

Customer No. 20,995

(415) 954-4114

W:\DOCS\VAHVJAH-68121.DOC  
103003